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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,334	05/04/2006	Kyung-Goo Kang	1599-0326PUS1	5694

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

NGUYEN, THUY-AI N

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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03/31/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/578,334	Applicant(s) KANG ET AL.	
	Examiner THUY-AI N. NGUYEN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/04/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12- 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Because the claims failed to address the second component or compound beside metalaxy- M to compare as a ratio, for the purpose of examination, the examiner interpret that the percentage recited by the applicant is the percentage of metalaxy –M in the composition.

Claim 25 recites the limitation "fungicidal composition" in claim1. There is insufficient antecedent basis for this limitation in the claim, because claim 1 failed to address the fungicidal composition.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1- 5, 7, 9- 10, 12- 20, and 23 - 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Vogt et al. (US. 6,274,570).

Regarding claim 1, Vogt et al. teach the microemulsion composition (claim 36) comprising Metalaxyl (col. 3: 43- 48), polyoxyalkylene tristyrylphenyl ether (tristyrenephenol ethoxylate (col. 2: 1-5), calcium salt of alkylbenzene sulfonate, and solvents including lactone (col. 2: 1- 67), water miscible solvents including glycol, ethanol, pyrrolidone, and amide (i.e. dimethylacetamide and dimethylformamide) (col. 3: 1- 13), and water (col. 4: 58- 62).

Regarding claims 2- 4, Vogt et al. teach the microemulsion composition comprising the anionic form of polyoxyalkylene tristyrylphenyl ether (salt of tristyrenephenol ethoxylate), wherein the salt of the ethoxylate polyoxyalkylene contains from 8 to 30 moles of ethylene oxide (col. 2: 1- 12).

Regarding claim 5, Vogt et al. teach the composition, wherein the calcium salt of alkylbenzene sulfonic acid is the calcium salt of dodecylbenzene sulfonate (col. 2: 29- 34).

Regarding claim 7, see rejection of claim 1.

Regarding claims 9 - 10, Vogt et al. teach the composition, wherein the aqueous solvent are ethyleneglycol, ethanol, methyl-2-pyrrolidone, N,N- dimethylacetamide, and N,N- dimethylformamide (col. 3: 5- 13).

Regarding claims 12- 14, Vogt et al. teach the composition, wherein the pesticide (including the metalaxyl, col. 3: 14- 45) is present in an amount of from 10 to 90 percent weight relation to the volume of the composition (col. 4: 23- 28), which is equivalent to 10 to 90 percent by weight of the composition.

Regarding claims 15- 17, Vogt et al. teach the composition, wherein the aqueous solvent (or organic solvent, including water soluble solvent (col. 2: 54- col. 3: 13) is present in an amount of from 1 to 96 percent of the composition (col. 4: 28- 30).

Regarding claim 18- 20, Vogt et al. teach the composition, wherein the amount of emulsifier (surfactants) is from 3 to 80 percent of the composition (col. 4: 30- 35).

Regarding claim 23, Vogt et al. teach the composition as described above. Vogt et al. teach the composition comprising no pigment (dye) that meets 0 percent of pigment as recited by the applicant.

Regarding claim 24, Vogt et al. teach the microemulsion composition prepared by diluting with water (col. 8, claim 36).

Regarding claim 25, Vogt et al. teach the method for controlling plant disease by diluting the composition as described above with water and applying an effective amount of the dilution to the plant (col. 4: 58- 67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogt et al. (US. 6,274,570).

Regarding claims 21 and 22, Vogt et al. teach the composition being diluted with water to obtain the microemulsion form (claims 36 and 39). However, Vogt et al. do not specifically teach the amount of water being added. The experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to optimize the amount of water being added to the composition to achieve the desired microemulsion composition. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215.

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogt et al. (US. 6,274,570) as applied to claim 1 above in view of Flahive (US. 5,965,487).

Regarding claims 6, and 8, Vogt et al. teach the composition as described above. However, Vogt et al. do not teach the composition comprising dialkylsuccinic acid. Flahive teaches the herbicidal composition comprising sodium di-2-ethylhexyl sulfosuccinate, and dodecylbenzenesulfonate. Vogt et al. and Flahive are analogous arts because they are in the same field of endeavor, namely, herbicidal composition. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use sodium di-2-ethylhexyl sulfosuccinate, and dodecylbenzenesulfonate in the

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teaching of Flahive into the teaching of Vogt et al.. The motivation would be to improve the dilution properties of the active materials (Flahive, col. 3: 5- 30).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vogt et al. (US. 6,274,570) as applied to claims 1, 9, and 10 above, in view of Flahive (US. 5,965,487).

Regarding claim 11, Vogt et al. teach the composition as described above. However, Vogt et al. do not teach the composition comprising propylene glycol. Flahive teaches the herbicidal composition comprising propylene glycol. Vogt et al. and Flahive are analogous arts because they are in the same filed of endeavor, namely, herbicidal composition. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use propylene glycol in the teaching of Flahive into the teaching of Vogt et al.. The motivation would be to improve the dilution properties of the active materials (Flahive, col. 3: 5- 30).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THUY-AI N. NGUYEN whose telephone number is (571)270-3294. The examiner can normally be reached on Monday-Friday: 8:30 a.m. - 5:00 p.m. eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 25, 2008

Patent Examiner
Thuy- Ai N. Nguyen

/David Wu/

Supervisory Patent Examiner, Art Unit 1796